



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/613,256 | 07/03/2003 | Gerhard Reichert | 1663-AI | 4893 |

7590 03/22/2006

Fred H. Zollinger III
P.O. Box 2368
North Canton, OH 44720

| |
|----------|
| EXAMINER |
|----------|

AMIRI, NAHID

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3679

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,256

Applicant(s)

REICHERT, GERHARD

Examiner

Nahid Amiri

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 62-93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 62-93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>exhibit</u> . |

DETAILED ACTION

RCE

This office action is in response to the amendment/request for continued examination (RCE) dated 16 February 2006. However, the case is not in condition for allowance in view of the new grounds of rejection set forth below. Amendments to the claims have been entered. Claims 1-61 are canceled. Claims 62-93 are pending.

Claim Objections

Claims 62, 70, 78, 85, and 90 are objected to because of the following informalities: lines 1-2, after "glazing unit" the phrase "having an internal muntin bar; the unit" should be deleted. Appropriate correction is required. In lines 4, 5, and 6, "insulating chamber" should be changed to --gap--.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 62-68, 70-76, and 78-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,35,743 Baier in view of US Patent No. 5,732,517 Milikovsky.

With respect to claims 62-68, 70-76, and 78-83, Baier discloses a simulated divided lite insulating glazing unit (Fig. 4) comprising first and second spaced glass panes (12, 14) spaced

Art Unit: 3679

defining a gap, a resilient foam internal muntin bar (22) disposed inside the gap which inherently is capable of being rolled into a roll for storage and shipping and then unrolled for application to the glass; the internal muntin bar (22) dividing the gap into separate portions to provide a divided-lite appearance to the glazing unit; the internal muntin bar (22) having a body having a Longitudinal direction, the body having opposed base walls (24) separated by the height of the body; one of the base walls (24) having an adhesive (34) that connects the base wall (24) to an inner surface of one of the glass panes (14); the base wall having the adhesive (34) defining a body width the body being formed from a body material. Baier does not disclose the body defining at least one open insulating cavity, the insulating cavity having a cross sectional area measured along a cross section taken through the cavity perpendicular to the longitudinal direction of the body; the insulating cavity being surrounded by the body; and the body material having a cross sectional area when measured along across section taken perpendicular to the longitudinal direction of the body; the cross sectional area of the body material being larger than the cross sectional area of the insulating cavity; wherein the body defines a plurality of insulating cavities which each cavities extending continuously in the longitudinal direction; and cavities are spaced from one another; wherein the cavity has a width, the space between the cavities being equal to or greater than the width of either cavity. Milikovsky teaches a window unit (Fig. 2) having glass panes and a muntin bar (3) between glass panes (2 and 4); the muntin bar (3) defining a body (B, see attachment), the body (B) defining a plurality of insulating cavities (C, see attachment) which also includes a limitation of having at least one cavity; the insulating cavity (C) having a cross sectional area inherently measured along a cross section taken through the cavity (C) perpendicular to the longitudinal direction of the body; the insulating cavity (C) being surrounded by the body (B); and the body material (B) having across sectional area when measure along a cross section taken perpendicular to the longitudinal direction of the body (B); the cross section of body material (B) being larger than the cross sectional area of the insulating cavity (C); wherein the body (B) defining a longitudinal direction; and each of the insulating cavity (C) extending continuous in the longitudinal direction; the cavities (C) are spaced apart from one another; and wherein the cavity (C) has a width, the space between the cavities (C) being equal to or greater than the width of either cavity. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the muntin bar of Baier with

a plurality of cavities as taught by Milikovsky in order to reduce the cost of constructing a window unit and create a light weight unit.

Claims 69, 77, and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baier and Milikovsky as applied to claims 62-68, 70-76, and 78-83 above, and further in view of US Patent No. 5,156,894 Hood et al.

With respect to claims 69, 77, and 84, Baier and Milikovsky disclose the claimed invention except that the body includes a desiccant. Hood et al. teach (Fig. 1, column 5, lines 18-21) the body (22) is formed from foam, and wherein the foam includes a desiccant. It would have been obvious to one of ordinary skill in the art at the time of invention was made to form the body of Milikovsky to includes a desiccant as taught by Hood et al. in order to provide a body with ability to prevents a build up of moisture between layers.

Claims 85-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baier in view of Milikovsky, and further in view of US Patent No. 5,156,894 Hood et al.

With respect to claims 85-93, Baier and Milikovsky disclose the claimed invention as stated above in claims 62-68, 70-76, and 78-83, except that the body fabricated from foam polymer and the foam includes a desiccant. Hood et al., teach (Fig. 1, column 5, lines 13-17) that the body (22) is formed from foam polymer and the foam includes a desiccant. It would have been obvious to one of ordinary skill in the art at the time of invention was made to form the body of Baier from foam polymer and the foam includes desiccant as taught by Hood et al. in order to provide the body with durability and high exceptional thermal insulation performance, and to provide a body with ability to prevents a build up of moisture between layers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-

Art Unit: 3679

7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nahid Amiri
Examiner
Art Unit 3679
February 22, 2005



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

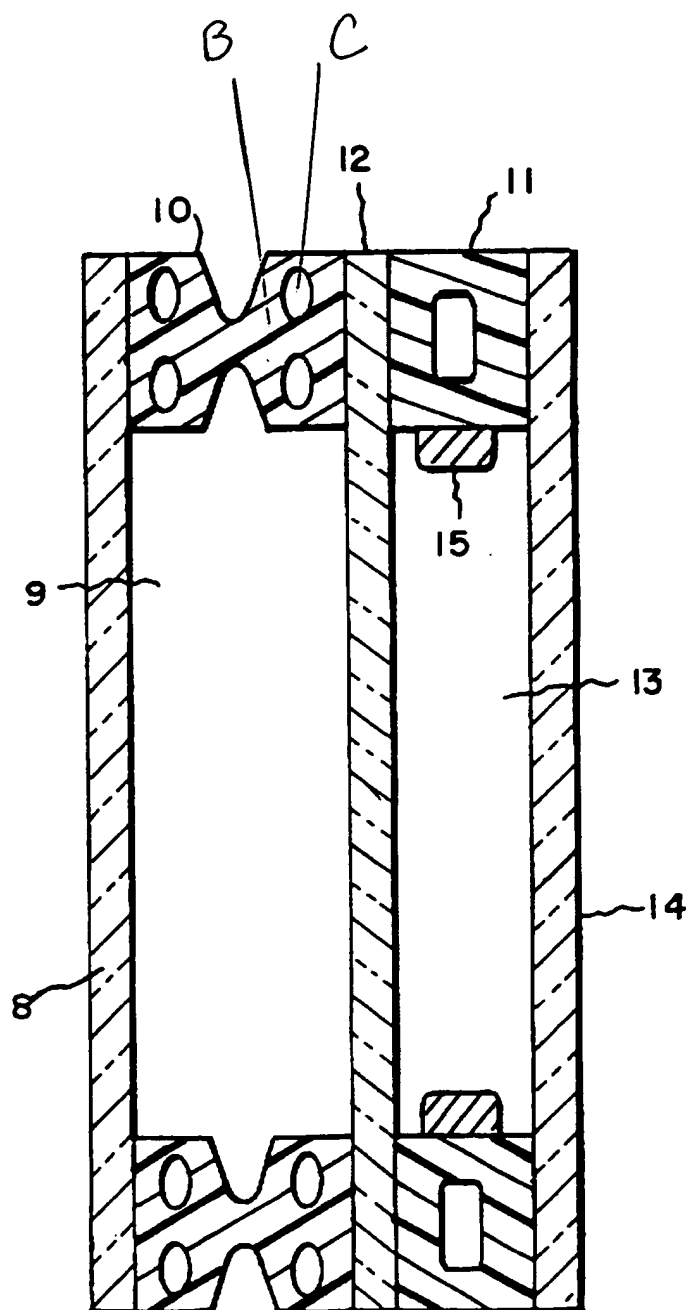


FIG. 2